

AMENDMENTS TO THE CLAIMS

- 1 1. (currently amended) A method for producing a pigment, comprising:
- 2 a) adding a phosphorus compound to an aqueous suspension of titanium dioxide base
- 3 material, then
- 4 b) adding a titanium compound; and
- 5 c) adding an aluminum compound,
- 6 wherein no significant amount of zirconium compound or magnesium compound is or has
- 7 been added to the aqueous suspension of titanium dioxide base material.
- 1 2. (Original) The method of claim 1, further comprising:
- 2 d) adjusting the pH value of the suspension to a value of from 8 to 10.
- 1 3. (Original) The method of claim 1, wherein the added phosphorus compound is an
- 2 inorganic phosphorus compound.
- 1 4. (Original) The method of claim 3, wherein the inorganic phosphorus compound is
- 2 selected from the group consisting of alkali phosphates, ammonium phosphates,
- 3 polyphosphates, and phosphoric acid.
- 1 5. (Original) The method of claim 1, wherein the added phosphorus compound is 0.4 to
- 2 6.0% by weight calculated as P_2O_5 , referred to TiO_2 base material in the suspension

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1 6. (Original) The method of claim 5, wherein the added phosphorus compound is 1.0 to
2 4.0% by weight, calculated as P_2O_5 , referred to TiO_2 base material in the suspension
3

1 7. (Original) The method of claim 6, wherein the added phosphorus compound is 1.6 to
2 2.8% by weight, calculated as P_2O_5 , referred to TiO_2 base material in the suspension
3

1 8. (Original) The method of claim 1, wherein the titanium compound added is a
2 hydrolyzable titanium compound.

1 9. (Original) The method of claim 8, wherein the titanium compound added is selected
2 from the group consisting of titanyl sulphate and titanyl chloride.

1 10. (Original) The method of claim 8, wherein the quantity of titanium compound added
2 is 0.1 to 3.0% by weight, calculated as TiO_2 , referred to TiO_2 base material in the
3 suspension.

1 11. (Original) The method of claim 10, wherein the quantity of titanium compound
2 added is 0.1 to 1.5% by weight, referred to TiO_2 base material in the suspension.

1 12. (Original) The method of claim 11, wherein the quantity of titanium compound
2 added is 0.1 to 1.0% by weight, calculated as TiO_2 , referred to TiO_2 base material in
3 the suspension.

3

1 13. (Original) The method of claim 1, wherein the quantity of titanium compound added
2 is 0.1 to 1.0% by weight, calculated as TiO_2 , referred to TiO_2 base material in the
3 suspension.

1 14. (Original) The method of claim 1, wherein the aluminum compound added is alkaline.

1 15. (Original) The method of claim 14, wherein the alkaline aluminum compound is
2 selected from the group consisting of sodium aluminate, alkaline aluminum
3 chloride, and alkaline aluminum nitrate.

1 16. (Original) The method of claim 14, further comprising

2 d) adjusting the pH value of the suspension to a value of from 8 to 10 after step c).

1 17. (Original) The method of claim 1, wherein the aluminum compound added is acidic.

1 18. (Original) The method of claim 17, further comprising:

2 d) adjusting the pH value to a value between 8 and 10 by adding an alkaline aluminum
3 compound.

1 19. (Original) The method of claim 17, further comprising:

2 d) adjusting the pH value to a value between 8 and 10 by adding an alkaline aluminum
3 compound in combination with a base.

1 20. (Original) The method of claim 1, wherein during the addition of the aluminum
2 compound, the pH value of the suspension is maintained constant in the range from
3 2 to 10 by the simultaneous addition of a pH modifying compound.

1 21. (Original) The method of claim 20, wherein during the addition of the aluminum
2 compound, the pH value of the suspension is maintained constant in the range from
3 4 to 9 by the simultaneous addition of a pH modifying compound.

1 22. (Original) The method of claim 21, wherein during the addition of the aluminum
2 compound, the pH value of the suspension is maintained constant in the range from
3 6 to 8 by the simultaneous addition of a pH modifying compound.

1 23. (Original) The method of claim 1, wherein the total quantity of the aluminum
2 compounds added is 2.0 to 7.5% by weight, calculated as Al_2O_3 , referred to TiO_2
3 base material

1 24. (Original) The method of claim 23, wherein the total quantity of the aluminum
2 compounds added is 3.5 to 7.5% by weight, calculated as Al_2O_3 , referred to TiO_2
3 base material.

1 25. (Currently Amended) The method of claim 2 ~~claim 1~~, further comprising
2 ~~d)~~ e) then, adding a magnesium compound.

1 26. (Original) The method of claim 25, wherein the magnesium compound added is
2 selected from the group consisting of magnesium sulphate and magnesium
3 chloride.

1 27. (Original) The method of claim 25, wherein the quantity of magnesium compound
2 added is 0.1 to 1.0% by weight, calculated as MgO, referred to TiO₂ base material in
3 the suspension.

1 28. (Original) The method of claim 27, wherein the quantity of magnesium compound
2 added is 0.2 to 0.5% by weight, calculated as MgO, referred to TiO₂ base material in
3 the suspension.

1 29. (Currently amended) The method of claim 25, further comprising
2 ~~f)~~ e) treating the pigment with an added material in order to influence the final pH value
3 of the suspension wherein the final pH value of the pigment is controlled by the pH and the
4 quantity of the added material.

1 30. (Original) The method of claim 29, where the added material is a nitrate compound.

1 31. (Original) The method of claim 30, where the finished pigment contains up to 1.0%
2 by weight NO₃.

1 32. (canceled)

1 33. (canceled)

1 34. (Original) The method of claim 1, where the titanium dioxide base material is milled
2 before step a).

1 35. (Original) The method of claim 34, where the titanium dioxide base material is wet-
2 milled and where a dispersant is added during milling.

1 36. (canceled)

1 37. (canceled)

1 38. (canceled)

1 39. (canceled)

1 40. (previously presented) A material, comprising;

2 a titanium dioxide pigment material; the titanium dioxide comprising TiO_2 particles, each
3 particle having a surface;

4 phosphorus containing material attached to the surface of each particle;

5 titanium containing material additional to the titanium dioxide material of the surface
6 attached to the phosphorus containing material; and

7 aluminum containing material attached to the titanium containing material additional to
8 the titanium dioxide material of the surface.

1 41. (previously presented) The material of claim 40, further comprising;

2 magnesium containing material attached to the aluminum containing material.

1 42. (previously presented) The material of claim 40, further comprising;

2 nitrate containing material attached to the aluminum containing material.

1 43.(previously presented) The material of claim 40, further comprising;

2 nitrate and magnesium containing material attached to the aluminum containing material.

1 44.(previously presented) The material of claim 40 , wherein the resultant particles

2 contain an insignificant amount of zirconium.

1 45. (previously presented) The material of claim 40 , wherein the titanium dioxide

2 pigment material is incorporated into a decorative laminated paper.

1 46. (canceled)

1 47. (previously presented) The material of claim 41, wherein the titanium dioxide pigment

2 material is incorporated into a decorative laminated paper.

1 48. (previously presented) The material of claim 42, wherein the titanium dioxide pigment

2 material is incorporated into a decorative laminated paper.

1 49. (previously presented) The material of claim 43, wherein the titanium dioxide pigment

2 material is incorporated into a decorative laminated paper.

1 50. (previously presented) The material of claim 44, wherein the titanium dioxide pigment

2 material is incorporated into a decorative laminated paper.

1 51. (previously presented) A method for producing a pigment, comprising:

2 a) adding a phosphorus compound to an aqueous suspension of titanium dioxide base
3 material, wherein the added phosphorus compound is 1.6 to 2.8% by weight,
4 calculated as P_2O_5 , referred to TiO_2 base material in the suspension; then

5 b) adding a titanium compound; and

6 c) adding an aluminum compound.

1 52. (Currently Amended) A method for producing a pigment, comprising:

2 a) adding a phosphorus compound to an aqueous suspension of titanium dioxide base
3 material, then

4 b) adding a titanium compound; and

5 c) adding an acidic aluminum compound, wherein no significant amount of magnesium
6 compound is or has been added to the aqueous suspension of titanium dioxide base
7 material.

1 53. (previously presented) The method of claim 52, further comprising:

2 d) adjusting the pH value to a value between 8 and 10 by adding an alkaline aluminum
3 compound.

1 54. (previously presented) The method of claim 52, further comprising:

2 d) adjusting the pH value to a value between 8 and 10 by adding an alkaline aluminum
3 compound in combination with a base.

4 55. (previously presented) A method for producing a pigment, comprising:

5 a) adding a phosphorus compound to an aqueous suspension of titanium dioxide base
6 material, then

7 b) adding a titanium compound; and

8 c) adding an aluminum compound, and

d) adding a magnesium compound.

1 56. (previously presented) The method of claim 55, wherein the magnesium compound
2 added is selected from the group consisting of magnesium sulphate and magnesium
3 chloride.

1 57. (previously presented) The method of claim 55, wherein the quantity of magnesium
2 compound added is 0.1 to 1.0% by weight, calculated as MgO, referred to TiO₂ base
3 material in the suspension.

1 58. (previously presented) The method of claim 57, wherein the quantity of magnesium
2 compound added is 0.2 to 0.5% by weight, calculated as MgO, referred to TiO₂ base